

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 5

IN THE MATTER OF:	)	
	)	
United States Steel Company	)	NOTICE OF VIOLATION
Gary Works	)	
One North Broadway	)	EPA-5-02-16-IN
Gary, Indiana 46402	)	
	)	
Proceedings Pursuant to	)	
Section 113(a)(1) of the	)	
Clean Air Act, 42 U.S.C.	)	
§ 7413(a)(1)	)	

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**NOTICE OF VIOLATION**

The United States Environmental Protection Agency (USEPA) is issuing this Notice of Violation under Section 113(a)(1) of the Clean Air Act, 42 U.S.C. § 7413(a)(1). USEPA finds that United States Steel Company is violating the Indiana State Implementation Plan (SIP), as follows:

**Statutory and Regulatory Background**

1. On March 3, 1978, pursuant to the requirements of Section 110 of the Clean Air Act (Act), 42 U.S.C. § 7410, USEPA designated Lake County, Indiana, as nonattainment for the National Ambient Air Quality Standard for sulfur dioxide. 43 Fed. Reg. 8962.
2. Part D of the Act, 42 U.S.C. §§ 7501-7509, added by the 1977 Act amendments, specifies the requirements that must be included in a State Implementation Plan (SIP) for those areas not attaining the National Ambient Air Quality Standards. Each SIP must contain a permit program for the construction and operation of new or modified major stationary sources, require these sources to meet an emission limitation defined as the Lowest Achievable Emission Rate, and require these sources to obtain air emission offsets.
3. Pursuant to 40 C.F.R. § 52.24(a), no major stationary source located in a nonattainment area may be modified after June 30, 1979, unless the State has an approved SIP meeting the requirements of Part D of the Act, 42 U.S.C. §§ 7501-7509.

4. On November 5, 1981, the USEPA approved Indiana Title 325, Article 1, Rule 1, "Definitions" (325 IAC 1.1-1), as part of the federally enforceable Indiana SIP. 46 Fed. Reg. 54943. The definitions approved include: facility, Lowest Achievable Emission Rate, major facility, modification, potential emissions, and regulated pollutant.
5. Under 325 IAC 1.1-1, section 27, "facility" is defined as "[a]ny one (1) structure, piece of equipment, installation or operation which emits or has the potential to emit any air contaminant. Single pieces of equipment or installations with multiple emission points shall be considered a facility for the purpose of this rule" (325 IAC 1.1-1 [recodified to 326 IAC 1-2]).
6. Under 325 IAC 1.1-1, section 37, "Lowest Achievable Emission Rate" is defined as: for any facility, that rate of emissions which reflects the more stringent of the following:
  - (1) the most stringent emissions limitation and/or the limitation resulting from equipment standards which are contained in the state implementation plan for such class or category of facility unless the owner or operator of the proposed facility demonstrates to the Board that such limitations are not achievable; or
  - (2) the most stringent emissions limitation resulting from equipment standards or which has been achieved in practice by such class or category of facility.
7. Under 325 IAC 1.1-1, section 39, "major facility" is defined as: any facility which has the potential to emit one hundred (100) tons or more per year of any one (1) regulated pollutant.
8. Under 325 IAC 1.1-1, section 43, "modification" is defined as: an addition to an existing facility or any physical change or change in the method of operation of any facility which increases the potential or legally allowed emissions (whichever is more stringent) of any pollutant that could be emitted from the facility or which results in emissions of any pollutant not previously emitted, except that the exceptions set forth in section 1 in 325 IAC 2-1 (formerly Regulation APC 19) also shall not be considered a modification unless previously limited by enforceable permit conditions.
9. Under 325 IAC 1.1-1, section 58, "potential emissions" is defined as: emissions of any one (1) pollutant which would

be emitted from a facility if that facility were operated without the use of pollution control equipment unless such control equipment is (aside from air pollution control requirements) necessary for the facility to produce its normal product or is integral to the normal operation of the facility. Potential emissions shall be based on maximum annual rated capacity unless hours of operation are limited by enforceable permit conditions. Potential emissions from a facility shall take into account the hours of operation per year and shall be calculated according to federal emission guidelines in AP 42-most recent edition-Compilation of Air Pollution Factors, or calculated based on stack test data or other equivalent data acceptable to the commissioner.

10. Under 325 IAC 1.1-1, section 69, regulated pollutant is defined as: any pollutant for which a rule establishing emission limitations or requirements has been promulgated by the board.
11. On February 16, 1982, the USEPA approved Indiana Air Pollution Control Board Rule Number 19 (APC-19), as part of the federally enforceable Indiana SIP. 47 Fed. Reg. 6621. The USEPA found APC-19 to meet the requirements of Part D of the Act.
12. APC-19, section 2(b), "Applicability", requires that any person proposing to begin construction, modification, or reconstruction of any facility which will result in a potential increase in emissions of 25 tons per year or more of any regulated pollutant shall comply with the requirements of APC-19, section 4.
13. APC-19, section 4, subsection (a), states that no person subject to the regulation shall commence construction, modification, or reconstruction without first applying for and obtaining a construction permit.
14. APC-19, section 5, states that no person subject to the regulation shall operate without first applying for and obtaining a permit to operate.
15. APC-19, section 4, subsection (b)(4), requires that any person proposing the construction, modification or reconstruction of a major facility located in a nonattainment area shall comply with the requirements of APC-19, section 8.
16. APC-19, section 8, subsection (a)(2), requires that any

person proposing the construction, modification or reconstruction of a major facility located in a nonattainment area offset the resulting emissions increases with emission reductions of the same pollutant from another existing facility.

16. APC-19, section 8, subsection (a)(3), requires that any person proposing the construction, modification or reconstruction of a major facility located in a nonattainment area apply emission limitation devices or techniques to attain the Lowest Achievable Emission Rate for the pollutant.
17. On October 7, 1994, USEPA approved Title 326, Article 2, Rule 3, of the Indiana Administrative Code (326 IAC 2-3) as part of the federally enforceable SIP. 59 Fed. Reg. 51108.
18. Under 326 IAC 2-3-2(a), Rule 3 applies to all new and modified major stationary sources or major modifications constructed in a nonattainment area for a pollutant for which the stationary source or modification is major.
19. Under 326 IAC 2-3-1(b), "actual emissions" means the actual rate of emissions of a pollutant from an emissions unit, as determined in accordance with the following:
  - (1) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the unit actually emitted the pollutant during a two (2) year period which precedes the particular date and which is representative of normal source operation. The commissioner shall allow the use of a different time period upon a determination that it is more representative of normal source operation. Actual emissions shall be calculated using the unit's actual operating hours, production rates, and types of materials processed, stored, or combusted during the selected time period.
  - (2) The commissioner may presume that source-specific allowable emissions for the unit are equivalent to the actual emissions of the unit.
  - (3) For any emissions unit which has not begun normal operations on the particular date, actual emissions shall equal the potential to emit of the unit on that date.
20. Under 326 IAC 2-3-2(c), "allowable emissions" means the emissions rate of a source calculated using the maximum rated capacity of the source (unless a source is subject to state or federally enforceable permit limits which restrict the operating rate or hours of operation, or both) and the

most stringent of the following:

(1) The applicable standards as set forth in 40 C.F.R. 60 and 40 C.F.R. 61, New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPS), respectively.

(2) The emissions limitation imposed by any rule in this title, including those with a future compliance date.

(3) The emissions rate specified as a federally enforceable permit condition, including those with a future compliance date.

21. Under 326 IAC 2-3-1(o), "lowest achievable emission rate" or "LAER" means, for any source, the more stringent rate of emissions based on the following:

(1) The most stringent emissions limitation which is contained in the implementation plan of any state for such class or category of stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable.

(2) The most stringent emissions limitation which is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions unit within the stationary source. In no event shall the application of the lowest achievable emission rate permit a proposed new or modified stationary source to emit any pollutant in excess of the amount allowable under applicable new source standards of performance.

22. Under 326 IAC 2-3-1(p), "major modification" means, in part, any physical change or change in the method of operation of a major stationary source that would result in a significant net emissions increase.

23. Under 326 IAC 2-3-1(q), "major stationary source" means, in part, any stationary source of air pollutants which emits, or has the potential to emit, one hundred (100) tons per year or more of any air pollutant subject to regulation under the Clean Air Act.

24. Under 326 IAC 2-3-1(t), "net emissions increase", with reference to a significant net emissions increase, means, in part, the amount by which the sum of the emission increases and decreases at a source exceeds zero (0), including any increase in actual emissions from a particular physical change or change in the method of operation.

25. Under 326 IAC 2-3-1(v), "potential to emit" means the maximum capacity of a stationary source to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is federally enforceable.
26. Under 326 IAC 2-3-1(y), "significant", in reference to a net emissions increase or the potential of a source to emit any of the following pollutants, means a rate of emissions that would equal or exceed 40 tons per year of sulfur dioxide.
27. 326 IAC 2-3-3(a)(2) requires that, prior to issuance of a construction permit, the applicant will apply emission limitation devices or techniques to attain the Lowest Achievable Emission Rate for the pollutant.
28. 326 IAC 2-3-3(a)(5) requires that, prior to issuance of a construction permit, that emissions resulting from the construction or modification be offset by a reduction in actual emissions of the same pollutant from an existing source or combination of existing sources.
29. 326 IAC 2-3-3(a)(6) requires that the applicant must obtain the necessary preconstruction approvals and must meet all the permit requirements specified in Rule 326 IAC 2-1.
30. 326 IAC 2-1-3(a) requires that no person required to comply with section 1(b)(1) of Rule 326 IAC 2-1 shall commence construction or modification of any source or facility without first applying for and obtaining a construction permit.
31. 326 IAC 2-1-1(b)(1) applies to sources, facilities or modifications with allowable emissions of twenty-five (25) tons or more per year of any regulated pollutant.

#### **Factual Background**

32. United States Steel Company owns and operates a Steel Mill at One North Broadway, Gary, Indiana.
33. The Steel Mill is a major stationary source.
34. The Steel Mill is located in an area designated

nonattainment for sulfur dioxide.

35. In 1981 and 1998, US Steel modified the Steel Mill by constructing the South Hot Metal Desulfurization facility.
36. US Steel did not receive any construction permit authorizing emissions of sulfur dioxide for the construction of the South Hot Metal Desulfurization facility.
37. The South Hot Metal Desulfurization facility has the potential to emit greater than 100 tons per year of sulfur dioxide, and emitted greater than 65 tons of sulfur dioxide in the year 2000. The facility has no legally allowable emission limitation.
38. In 1987, US Steel modified the Steel Mill by constructing the North Hot Metal Desulfurization facility.
39. US Steel did not receive any construction permit authorizing sulfur dioxide emissions for the construction of the North Hot Metal Desulfurization facility.
40. The North Hot Metal Desulfurization facility has the potential to emit greater than 115 tons per year of sulfur dioxide, and emitted greater than 81 tons of sulfur dioxide in the year 2000. The facility has no legally allowable emission limitation.

#### **Violations**

41. In 1981, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of APC-19, section 4, subsection (a), by not first applying for and obtaining the required construction permit.
42. In 1981, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of APC-19, section 4, subsection (a), by not first applying for and obtaining the required operating permit.
43. In 1981, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of APC-19, section 8, subsection (a)(2), by not first obtaining the necessary offsets.
44. In 1981, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of APC-19, section 8, subsection (a)(3), by not


first applying emission limitation devices or techniques to attain the Lowest Achievable Emission Rate.

45. In 1987, and continuing to the present, US Steel constructed and operated the North Hot Metal Desulfurization facility in violation of APC-19, section 4, subsection (a), by not first obtaining the required construction permit.
46. In 1987, and continuing to the present, US Steel constructed and operated the North Hot Metal Desulfurization facility in violation of APC-19, section 4, subsection (a), by not first obtaining the required operating permit.
47. In 1987, and continuing to the present, US Steel constructed and operated the North Hot Metal Desulfurization facility in violation of APC-19, section 8, subsection (a)(2), by not first obtaining the necessary offsets.
48. In 1987, and continuing to the present, US Steel constructed and operated the North Hot Metal Desulfurization facility in violation of APC-19, section 8, subsection (a)(3), by not first applying emission limitation devices or techniques to attain the Lowest Achievable Emission Rate.
49. In 1998, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of 326 IAC 2-1-3(a), by not first obtaining the required construction permit.
50. In 1998, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of 326 IAC 2-1-3(a), by not first obtaining the required operating permit.
51. In 1998, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of 326 IAC 2-3-3(a)(2), by not applying emission limitation devices or techniques to attain the Lowest Achievable Emission Rate.
52. In 1998, and continuing to the present, US Steel constructed and operated the South Hot Metal Desulfurization facility in violation of 326 IAC 2-3-3(a)(5), by not first obtaining the necessary offsets.

**FINDING OF VIOLATION**

The Administrator of the U.S. EPA, by authority duly delegated to the undersigned, notifies the State of Indiana and US Steel that US Steel is in violation of the Indiana SIP as set forth in this Notice of Violation.

3/6/2003  
Date

  
Cheryl L. Newton, Acting Director  
Air and Radiation Division

**CERTIFICATE OF MAILING**

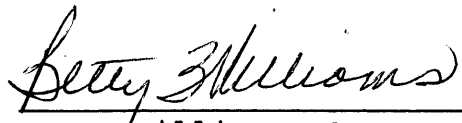
I, Betty Williams, certify that I sent a Notice of Violation, No. EPA-5-02-16-IN, by Certified Mail, Return Receipt Requested, to:

Mr. James M. Alexander  
Manager Environmental Air Compliance  
United States Steel Company  
Gary Works  
One North Broadway  
Gary, Indiana 46402

I also certify that I sent copies of the Notice of Violation by first class mail to:

David McIver, Chief  
Office of Enforcement, Air Section  
Indiana Department of Environmental Management  
100 North Senate Avenue, Room 1001  
Indianapolis, Indiana 46206-6015

on the 6th day of March, 2003.

  
Betty Williams, Secretary  
AECAS, (IL/IN)

CERTIFIED MAIL RECEIPT NUMBER: 7001 0320 0006 0178 3547